

SBIInet Fence Lab Overview

April 26, 2007

The Objective of this review is to provide a briefing on SBIInet's Fence Lab effort to date. Included in the scope of this review is: an overview of Fence Lab Objectives; overview of fence/barrier evaluation criteria and process; Fence Lab roles, responsibilities, and schedule; and preliminary findings and recent developments.

The Fence Lab Project was established in November of 2006 to identify, test, and evaluate fence/barriers for low cost, rapid deployment, and high performance. After candidates are tested and evaluated, they are to be added to the SBIInet "Tool Box" on May 11, 2007. The "Tool Box" is to be comprised of designs, drawings, maintenance plans, and repair plans. A "Buyer's Guide" (i.e. consumer report) will be made available on May 11, 2007 in order to help users select fence/barriers according to different needs and requirements along the SW border. Included in the "Buyer's Guide" will be Boeing's Interim Report and a series of appendices developed by the Fence Lab team to address additional information required for decision making.

Fence Lab created a nineteen Point Criteria in December of 2006 to establish minimal standards for accepting fence/barriers and to establish metrics for evaluating candidates. The performance criteria includes minimizing cost to below \$1.3 million/mile, maximizing deployment to 1 mile/day or better, (b) (7)(E), applicable to a wide range of environmental conditions on the SW Border, comprised of COTS materials and parts, and maximizing life expectancy and minimizing maintenance and repairs.

The Boeing contract was officially awarded on March 16th, 2007 and provided eight weeks to construct, test, and evaluate nine different fence/barriers by May 11th, 2007. (b) (7)(E) was selected for their test facility and to provide crash testing and subject matter experts.

Due to the time constraints, the identification of fence/barrier candidates was limited to COTS and the Boeing Suppliers Database. Fifteen suppliers submitted COTS designs from the Boeing database and six were selected for testing and evaluation at (b) (7)(E) along with three government developed solutions). The three government solutions being tested are; the (b) (7)(E)

Fence Lab has identified several fence and barrier candidates that are low cost (under \$1.3M per mile), quickly deployable (one mile per day) and high performing, but one design will not fit the needs of the SW Border. Each sector or station has difference requirements based on local needs such as: functional applications, soil, terrain and environments, fencing materials, different configurations, and additional features and integrated technology that would enhance the fence/barrier performance. Each fence/barrier has its pros/cons and strengths/weaknesses that will need to be matched/assessed against local needs. The Fence Lab "Buyers Guide" will attempt to assist decision makers with information to match fence/barriers with local needs.

Since the award of Boeing's contract on March 16th, additional unique requirements have been identified by project PF225 and Border Patrol. Fence Lab will attempt to address these issues in the "Buyers Guide" appendices. One of these requirements is a need for different fencing materials (i.e. Interchangeable designs, different fence materials, third party features could be added). Fence Lab and Boeing have identified other potential candidates for testing and evaluating in future endeavors. Due to the limited scope of this project, follow on work has not been agreed upon past the Interim Report date of May 11th.